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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Gunnar G. Leinberg, Esq.
Nixon Peabody LLP
Clinton Square
P.O. Box 31051
Rochester, NY 14603-1051

EXAMINER	
AILES, BENJAMIN A	
ART UNIT	**PAPER NUMBER**
2142	

DATE MAILED: 07/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/939,937	AMORIN ET AL.	
	Examiner	Art Unit	
	Benjamin A. Ailes	2142	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 April 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18 and 31-36* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18, 31-36* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 24 April 2006 has been entered.

2. Claims 1-18 and 31-36 remain pending.

Response to Arguments

3. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1, 6, 7, 12, 13, 18, 31 and 32 rejected under 35 U.S.C. 103(a) as being unpatentable over Bennett (U.S. 5,872,781) in view of Hluchyj (US 2002/0041591 A1).

6. Regarding claim 1, Bennett teaches a method for identifying one of a plurality of communication channels for communication between one of a plurality of devices and a server, the method comprising:

monitoring each of the plurality of communication channels (figure 2, item 34) between the plurality of devices and the server (col. 6, ll. 27-30);

determining whether at least one of the plurality of communication channels is being used for the transmission link pulses by the server, wherein the presence of link pulses on one of the communication channels indicates that that particular communication channel is not currently being used for data transmission by the server and is available (col. 6, ll. 27-34); and

establishing a connection between the device and the server using one of the available communication channels determined to have the link pulses (col. 6, ll. 38-40).

Bennett teaches the use of a server being connected to but is silent regarding the communication channel being connectable to a respective port among a plurality of ports of the server. A server maintaining a plurality of ports that are connectable to by devices in a network is deemed an inherent characteristic of a server. Hluchyj demonstrates and describes this type of system. Hluchyj teaches the connection of a networked device to one of a server's plurality of ports. Hluchyj teaches this feature in Figure 4 and in paragraph 0027 on page 3 wherein a network server includes a plurality of ports that are connectable to a network which in turn connects a plurality of other network enabled devices. One of ordinary skill in the art at the time of the applicant's invention would have found it obvious to provide a network server that has a plurality of ports that a plurality of networked devices can connect to through a network. One of ordinary skill in the art would have found it obvious to utilize a network server similar to one disclosed by Hluchyj in combination with Bennett. One of ordinary skill in the art

would have been motivated to make this reasonable combination due to the inherency and increased functionality (ability to communicate with more devices) by a server having a plurality of ports.

7. Independent claims 7 and 13 contain similar subject matter and are rejected under the same rationale as claim 1.

8. Regarding claim 6, Bennett and Hluchyj the method further comprising providing an indication of which of the plurality of communication channels was the established communication channel for the device (Bennett, col. 7, lines 18-20).

9. Claims 12 and 18 contain similar subject matter and are rejected under the same rationale as claim 6.

10. Regarding claims 31 and 32, Bennett teaches the monitoring aspect for each device but is silent regarding the communication channel being connectable to a respective port among a plurality of ports of the server. A server maintaining a plurality of ports that are connectable to by devices in a network is deemed an inherent characteristic of a server. Hluchyj demonstrates and describes this type of system. Hluchyj teaches the connection of a networked device to one of a server's plurality of ports. Hluchyj teaches this feature in Figure 4 and in paragraph 0027 on page 3 wherein a network server includes a plurality of ports that are connectable to a network which in turn connects a plurality of other network enabled devices. One of ordinary skill in the art at the time of the applicant's invention would have found it obvious to provide a network server that has a plurality of ports that a plurality of networked devices can connect to through a network. One of ordinary skill in the art would have

found it obvious to utilize a network server similar to one disclosed by Hluchyj in combination with Bennett. One of ordinary skill in the art would have been motivated to make this reasonable combination due to the inherency and increased functionality (ability to communicate with more devices) by a server having a plurality of ports.

11. Regarding claim 33, Bennett teaches the monitoring aspect for each device but is silent regarding the communication channel being connectable to server ports simultaneously by a plurality of devices. A server maintaining a plurality of ports that are connectable to by devices simultaneously in a network is deemed an inherent characteristic of a server. Hluchyj demonstrates and describes this type of system. Hluchyj teaches the connection of a networked device to one of a server's plurality of ports. Hluchyj teaches this feature in Figure 4 and in paragraph 0027 on page 3 wherein a network server includes a plurality of ports that are connectable to a network which in turn connects a plurality of other network enabled devices. One of ordinary skill in the art at the time of the applicant's invention would have found it obvious to provide a network server that has a plurality of ports that a plurality of networked devices can connect to through a network. One of ordinary skill in the art would have found it obvious to utilize a network server similar to one disclosed by Hluchyj in combination with Bennett. One of ordinary skill in the art would have been motivated to make this reasonable combination due to the inherency and increased functionality (ability to communicate with more devices) by a server having a plurality of ports.

12. Claims 2-5, 8-11, 14, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bennett and Hluchyj in view of Allmond et al. (US 5,754,552), hereinafter referred to as Allmond.

13. Regarding claim 2, Bennett and Hluchyj does not expressly disclose that the monitoring further comprises monitoring one of the plurality of communication channels at a time for the one or more link pulses. However, Allmond discloses that it is well known that a plurality of communication channels can be monitored for link pulses in a mutually-exclusive manner, or one at a time (column 6, lines 56-57). Bennett and Allmond are analogous art because they are from the same field of endeavor of networking data devices. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify Bennett's method by allowing only one communication channel to be monitored at a time, as taught by Allmond. One of ordinary skill in the art would have been motivated for doing this is to sequentially monitor the communication channels. Therefore it would have been obvious to combine Allmond with Bennett for the benefit of sequential monitoring to obtain the invention as specified in claim 2.

14. Claims 8 and 14 contain similar subject matter and are rejected under the same rationale as claim 2.

15. Regarding claim 3, Bennett and Hluchyj does not explicitly disclose that the monitoring further comprises disabling the other of the plurality of communication channels while the one of the plurality of communication channels is monitored for the one or more link pulses. Allmond discloses that it is well known in the art that

communication channels other than the one being monitored can be disabled (col. 6, lines 59-63). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to disable Bennett's unmonitored communication channels, as taught by Allmond. The motivation for doing so would have been to prevent potential interference from the unmonitored signals. Therefore, it would have been obvious to combine Allmond with Bennett for the benefit of interference prevention to obtain the invention as specified in claim 3.

16. Claims 9 and 15 contain similar subject matter and are rejected under the same rationale as claim 3.

17. Regarding claim 4, Bennett and Hluchyj does not explicitly disclose that the monitoring of one of the plurality of communication channels is conducted by two or more devices. Allmond discloses that it is well known in the art that one communication channel can be monitored by two devices (figure 1, items 124 and 128). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to allow one of Bennett's communication channels to be monitored by two or more devices. The motivation for doing so would have been to allow more than one device to utilize the connection on that particular communication channel. Therefore, it would have been obvious to combine Allmond with Bennett for the benefit of connection utilization to obtain the invention as specified in claim 4.

18. Claim 10 contains similar subject matter and is rejected under the same rationale as claim 4.

19. Regarding claim 5, Bennett and Hluchyj does not explicitly disclose that the method further comprises blocking the communication channel monitored to have the link pulses for the one device from the other devices. Allmond discloses that it is well known that the communication channel monitored to have the link pulses for a particular device can be blocked from other devices (col. 6, lines 59-63). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to allow Bennett's devices that aren't receiving link pulses to be blocked from the communication channel carrying the pulses to another device. The motivation for doing so would have been to only allow the intended device to receive the pulses. Therefore, it would have been obvious to combine Allmond with Bennett for the benefit of appropriate pulse delivery to obtain the invention as specified in claim 5.

20. Claim 11 contains similar subject matter and is rejected under the same rationale as claim 5.

21. Claims 16, 33-36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bennett and Hluchyj in view of Patel et al. (U.S. 5,883,894), hereinafter referred to as Patel.

22. Regarding claim 16, Bennett and Hluchyj does not explicitly disclose that each of the devices has one of the monitoring systems. Patel discloses that is it is well known that it is possible for each port to have an auto-negotiation system, which performs port monitoring (col. 4, lines 32-34). Bennett and Patel are analogous art because they are both from the same field of endeavor of network devices. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to provide each of

Bennett's devices with a monitoring system, as taught by Patel. The motivation for doing so would have been to allow each of the devices to monitor the plurality of communication channels. Therefore, it would have been obvious to combine Patel with Bennett for the benefit of allowing each device to monitor communication channels to obtain the invention as specified in claim 16.

23. Regarding claim 33, Bennett teaches the monitoring aspect for each device but is silent regarding the communication channel being connectable to server ports simultaneously by a plurality of devices. A server maintaining a plurality of ports that are connectable to by devices simultaneously in a network is deemed an inherent characteristic of a server. Hluchyj demonstrates and describes this type of system. Hluchyj teaches the connection of a networked device to one of a server's plurality of ports. Hluchyj teaches this feature in Figure 4 and in paragraph 0027 on page 3 wherein a network server includes a plurality of ports that are connectable to a network which in turn connects a plurality of other network enabled devices. One of ordinary skill in the art at the time of the applicant's invention would have found it obvious to provide a network server that has a plurality of ports that a plurality of networked devices can connect to through a network. One of ordinary skill in the art would have found it obvious to utilize a network server similar to one disclosed by Hluchyj in combination with Bennett. One of ordinary skill in the art would have been motivated to make this reasonable combination due to the inherency and increased functionality (ability to communicate with more devices) by a server having a plurality of ports.

24. Regarding claims 34-36, Bennett and Hluchyj does not explicitly disclose that each of the devices has one of the monitoring systems. Patel discloses that is it is well known that it is possible for each port to have an auto-negotiation system, which performs port monitoring (col. 4, lines 32-34). Bennett and Patel are analogous art because they are both from the same field of endeavor of network devices. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to provide each of Bennett's devices with a monitoring system, as taught by Patel. The motivation for doing so would have been to allow each of the devices to monitor the plurality of communication channels. Therefore, it would have been obvious to combine Patel with Bennett for the benefit of allowing each device to monitor communication channels to obtain the invention.

25. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bennett, Hluchyj and Patel in view of Allmond.

26. Regarding claim 17, Bennett, Hluchyj and Patel do not explicitly disclose that the system further comprises a blocking system that blocks the communication channel monitored to have the link pulses for the one device from the other devices. Allmond discloses that it is well known that the communication channel monitored to have the link pulses for a particular device can be blocked from the other devices (col. 6, lines 59-63). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to allow Bennett's devices that are not receiving link pulses to be blocked from the communication channe3l carrying the pulses to another device. The motivation for doing so would have been to only allow the intended device to receive the

pulses. Therefore, it would have been obvious to combine Allmond with Bennett and Patel for the benefit of appropriate pulse delivery to obtain the invention as specified in claim 17.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin A. Ailes whose telephone number is (571)272-3899. The examiner can normally be reached on M-F 6:30-4, IFP Work Schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on (571)272-3868. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

baa

Beatriz Prieto
BEATRIZ PRIETO
PRIMARY EXAMINER